

# **A new concept and a newly emended diagnosis of the advanced peltasperm kuvakospermum pedatum naug. Et sidorov, emend. nov. from the kasanian (middle permian) deposits of russia**

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## **Abstract**

© 2018, Landesmuseum Karnten. All rights reserved. The paper is devoted to the monotypic genus *Kuvakospermum* Naug. et Sidorov, emend. nov., which is interpreted as a highly advanced representative of peltasperms (order Peltaspermales). The collection studied includes six specimens of *Kuvakospermum pedatum* Naugolnykh et Sidorov, emend. nov. (four of them are practically completely preserved megasporophylls and two specimens with the seeds preserved in natural connection to reproductive organ, but with the partly or completely detached megasporophyll shield). The megasporophyll is stalked, peltate, with round to ovoid megasporophyll shield with the lobed margin bearing long linear extenuations. Adaxial surface of the megasporophyll shield bears well-developed protective belt. The seeds were attached to adaxial surface of the megasporophyll in the space between the protective belt and the stalk, disposed concentrically around the stalk. Adaxial surface of the megasporophyll bears small secretory glands forming regular parastichies. Abaxial surface of the megasporophyll shield bears numerous small round resin bodies. Some possible fossil relatives and recent morphofunctional analogues of *Kuvakospermum pedatum* are discussed.

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## **Keywords**

Angaraland, Evolution, *Kuvakospermum*, Megasporophylls, Peltasperms, Permian

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